VPDES PERMIT FACT SHEET

This document gives pertinent information concerning the reissuance of the VPDES permit listed below. This permit is being processed as a Minor, Industrial permit. The effluent limitations contained in this permit will maintain the Surface Water Quality Standards of 9 VAC 25-260. The discharge results from the treatment of industrial wastewater generated at a retail facility selling gasoline and diesel fuel (SIC Code: 5541 – Gasoline Service Stations). This permit action consists of reissuing the permit with revisions to the permit, as needed, due to changes in applicable laws, guidance, and available technical information.

1. Facility Name and Address:
   WILCOHESS Travel Plaza #735
   5446 University Parkway
   Winston-Salem, NC 27105
   Location: 713 Oakland Circle, Raphine, VA 24472

2. Permit No.: VA0088277
   Expiration Date: April 12, 2009

3. Owner Contact: Name: Mr. Stephen T. Williams
   Title: President
   Telephone No: 336-767-6280

4. Application Complete Date: October 21, 2008

   Permit Drafted By: Trevor H. Wallace Date: 12/11/08
   Reviewed By: Eric R. Millard Date: 12/18/08
   Brandon Kiracofe Date: 1/13/09

   Public Comment Period: 2/11/2009 to 3/13/2009

5. Annual Permit Maintenance Fee per 9 VAC 25-20-142: $2,040.00
   VPDES Industrial Minor / No Standard Limits
   Highest Permitted Flow: N/A
   TMP? No
   > 5 outfalls? No

6. Receiving Stream Name: Moores Creek
   River Mile: 4.06
   Use Impairment?: Yes
   Special Standards: pH
   Tidal Waters?: No
   Watershed Name: VAV-I36R - South River
   Basin: James (Upper); Subbasin: N/A
   Section: 12a; Class: IV

7. Operator License Requirements per 9 VAC 25-31-200.C: N/A

8. Reliability Class per 9 VAC 25-790: N/A

9. Permit Characterization:
   ☑ Private ☐ Federal ☐ State ☐ POTW ☐ PVOTW
   ☐ Possible Interstate Effect ☐ Interim Limits in Other Document (attach copy of CSO)

10. Description of Treatment Works: **Appendix A**
    Total Number of Outfalls = Existing: 1; Proposed: 0
    Operation and Maintenance (O&M) Manual: Approved on 12/29/04; revisions are pending DEQ review and concurrence.
    NPDES Permit Rating Worksheet: New Score: 10; Old Score 30

11. Discharge Location Description and Receiving Waters Information: **Appendix B**
    Topo Map Number: 156B
    Topo Map Name: Vesuvius

12. Antidegradation Review & Comments per 9 VAC 25-260-30:
    Tier Designation: Tier 1

    The State Water Control Board's Water Quality Standards (WQS) includes an antidegradation policy. All state surface waters are provided one of three levels of antidegradation protection. For Tier 1 or existing use protection, existing uses of the water body and the water quality to protect these uses must be maintained. Tier 2 water bodies have water quality that is better than the water quality standards. Significant lowering of the water quality of Tier 2 waters is not allowed without an evaluation of the economic and social impacts. Tier 3 water bodies are exceptional waters and are so designated by regulatory amendment. The antidegradation policy prohibits new or expanded discharges into exceptional waters.

    The antidegradation review begins with a Tier determination. Moores Creek upstream and downstream of the facility discharge location is determined to be Tier 1 because the stream is included on the currently approved EPA 303(d) list for not meeting the General Standard (Benthics) for aquatic life use. Antidegradation baselines are not calculated for Tier 1 waters.

13. Site Inspection: Performed by: Trevor Wallace Date: December 03, 2008

14. Effluent Screening and Effluent Limitations: **Appendix C**

15. Management of Waste Solids:
    Waste solids generated at this facility are periodically disposed at a licensed waste facility in accordance with the approved O&M Manual.

16. Permit Changes and Bases for Special Conditions: **Appendix D**

17. Material Storage per 9 VAC 25-31-280.B.2: This permit requires that the facility's O&M Manual include information to address the management of wastes, fluids, and pollutants which may be present at the facility, to avoid unauthorized discharge of such materials.

18. Antibacksliding Review per 9 VAC 25-31-220.L: This permit complies with Antibacksliding provisions of the VPDES Permit Regulation. See Appendix C for a discussion of this requirement.

19. Impaired Water Use Status Evaluation per 9 VAC 25-31-220.D: Moores Creek upstream and downstream of the facility discharge locations is included on the currently approved EPA 303(d) list for not meeting the General Standard (Benthics) for aquatic life use. A TMDL has not been prepared and approved for the segment. The permit contains a re-opener condition that may allow the permit limits to be modified, in compliance with section 303(d)(4) of the Act once a TMDL is approved.

20. Regulation of Users per 9 VAC 25-31-280.B.9: N/A – There are no industrial users other than the owner of the system contributing to the treatment works.

21. Storm Water per 9 VAC 25-31-120: Application Required? ☐ Yes ☑ No

    This facility's SIC Code(s) and activities do not fall within the categories for which a Storm Water Application submittal is required. There are no regulated effluent requirements for storm water that is generated by retail activities.

22. Compliance Schedule per 9 VAC 25-31-250: A four year compliance schedule for meeting the new Naphthalene limit for Outfall 002 is included in the permit.

23. Variances/Alternate Limits or Conditions per 9 VAC 25-31-280.B, 100.J, 100.P, 100.L, and 100 L: None associated with this permit.

24. Financial Assurance Evaluation per 9 VAC 25: N/A – This facility does not treat sewage.

25. Virginia Environmental Excellence Program (VEEP) Evaluation per § 10.1-1187.1-7: At the time of this reissuance, is this facility considered by DEQ to be a participant in the Virginia Environmental Excellence Program in good standing at either the Exemplary Environmental Enterprise (E3) level or the Extraordinary Environmental Enterprise (E4) level? ☐ Yes ☑ No

26. Nutrient Trading Regulation per 9 VAC 25-820:
    General Permit Required: ☐ Yes ☑ No

27. Threatened and Endangered (T&E) Species Screening per 9 VAC 25-260-20 B.8: Because this is not a permit issuance or a reissuance that allows for increased discharge flows, T&E screening is not required.

28. Public Notice Information per 9 VAC 25-31-280.B: All pertinent information is on file, and may be inspected and copied by contacting Trevor Wallace at: DEQ-Valley Regional Office, P.O. Box 3000, Harrisonburg, Virginia 22801, Telephone No. (540) 574-7807, thwallace@deq.virginia.gov.

    Persons may comment in writing or by email to the DEQ on the proposed permit action, and may request a public hearing, during the comment period. Comments shall include the name, address, and telephone number of the writer, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The DEQ may decide to hold a public hearing if public response is significant. Requests for public hearings shall state the reason why a hearing is requested, the nature of the issues proposed to be raised in the public hearing and a brief explanation of how the requester's interests would be directly and adversely affected by the proposed permit action. Following the comment period, the Board will make a determination regarding the proposed permit action. This determination will become effective, unless the DEQ grants a public hearing. Due notice of any public hearing will be given.

29. Historical Record: Unless otherwise noted below, no documented substantive changes, such as an increase in design flow or frequency, have occurred at this facility since the permit issuance.
    1994: VPDES Issuance (Permit record now maintained in the Library of Virginia)
    4/12/99: VPDES Permit Reissuance (Permit record now maintained in the Library of Virginia)
    12/8/00: VPDES Permit Modification
    7/17/02: VPDES Permit Modification
    4/12/03: VPDES Permit Reissuance

APPENDIX A

DESCRIPTION OF WASTEWATERS AND TREATMENT FACILITIES

The operations at this facility that generate point source discharges and the treatment provided to those discharges is described below and on the following pages. There are no regulated discharge requirements for storm water generated from retail facilities. As such, Outfalls 001 and 003 will no longer be recognized in the permit, but are included in this fact sheet due to their recognition in the previous permit.

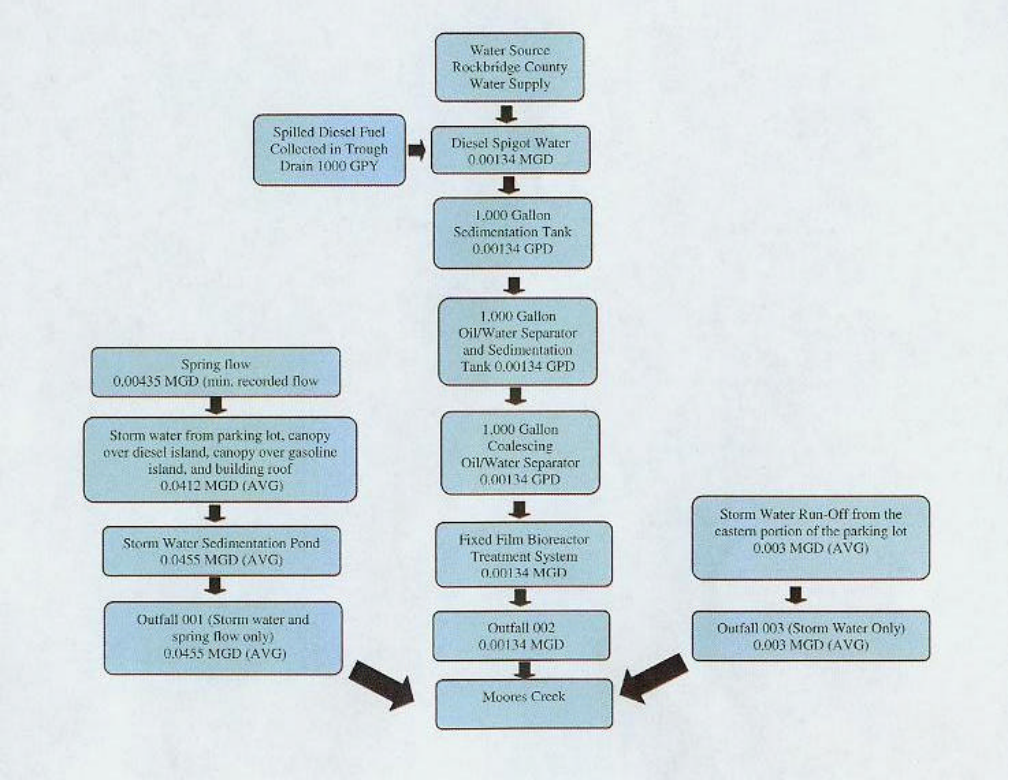
Outfall	Operations Contributing Flow	Treatment
001	Storm water runoff from canopies over the diesel and unleaded gasoline fueling islands, the store rooftop, and a portion of the parking lot surrounding these facilities.	Earthen basin lined with rip rap. BMPs include routine cleaning with a mechanical street sweeper and clean-up of any spills.
002	Process wastewater from the diesel fueling islands, includes incidental use of potable water from spigots by customers, occasional washdown of the area by employees, and spillage of diesel fuel dispensed by costumers.	OWS followed by a fixed film bioreactor, clarifier, and cascade aeration. Solids that accumulate in the OWS and clarifier are periodically removed and disposed at a licensed waste facility in accordance with the approved O&M Manual.
003	Storm water runoff from a portion of the paved area adjacent to the diked diesel and gasoline fuel storage and loading areas, as well as a paved parking lot serving the retail facility.	None. BMPs include routine cleaning with a mechanical street sweeper and clean-up of any spills.
---	Domestic Sewage	Domestic sewage generated by this facility is treated and discharged the Lexington-Rockbridge Regional WQCF (VPDES Permit No. VA0088161)

Flows:
Outfall 001: Long Term Average = 0.0455 MGD: The storm water discharge is dependent upon the magnitude and duration of a storm event. Flow is affected by a storm water detention pond and the applicant reported a long term average flow of 0.0455 MGD on Form 2C. The discharge is intermittent.

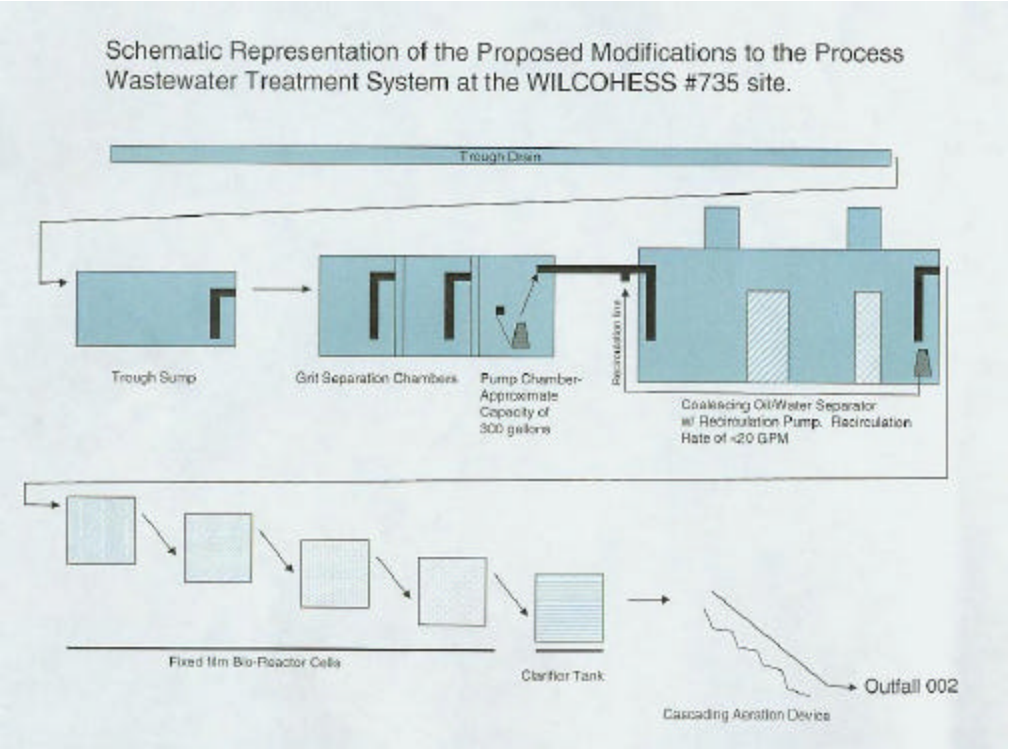
Outfall 002: Design Average Flow (Fixed Film Bioreactor Treatment System) = 0.0048 MGD: The bioreactor capacity limits the flow to Outfall 002. The OWS is rated for 0.216 MGD. The long term average flow through the treatment system is reported as 0.00134 MGD on Form 2C. At last reissuance, the effluent was evaluated at 0.002 MGD based on maximum monthly water meter reading. The system is designed to discharge intermittently. Flow data demonstrating the discharge is intermittent was submitted to DEQ on December 20, 2006.

Outfall 003: Long Term Average = 0.003 MGD: The untreated storm water discharge is dependent upon the magnitude and duration of a storm event. The applicant reported a long term average flow of 0.003 MGD on Form 2C. The discharge is intermittent.

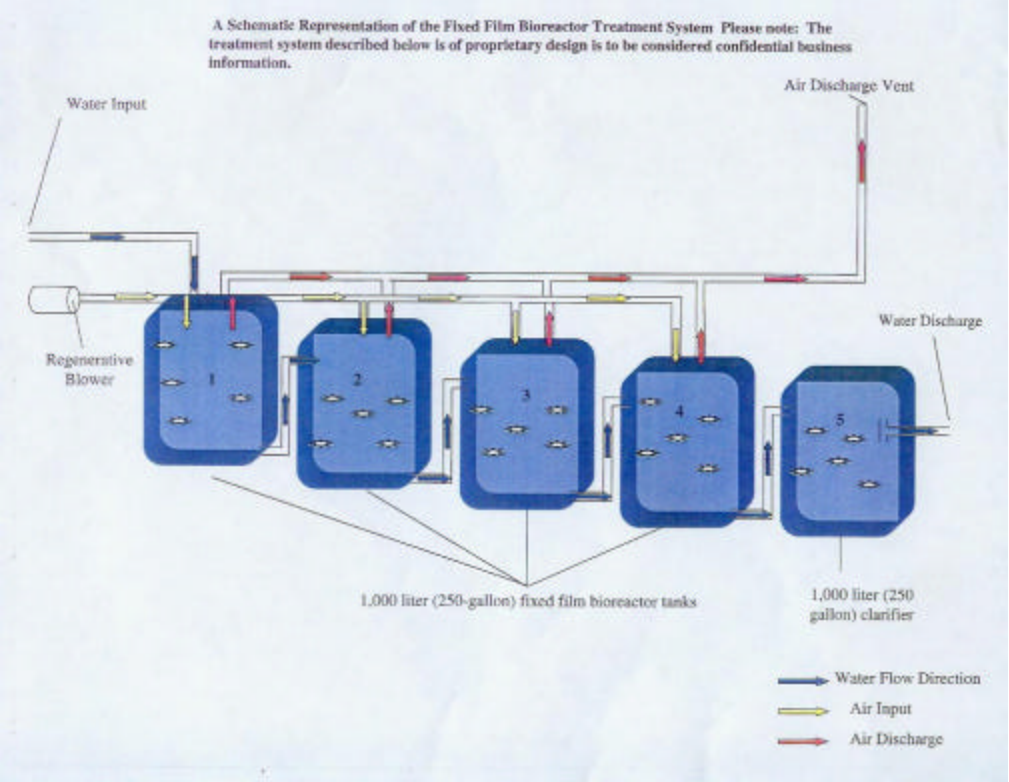
Line Drawing of Water Flows



OWS + Bioreactor Flow Schematic



Bioreactor Flow Schematic



VPDES Permit Rating Work Sheet

Facilities identified under SIC 5541 are not included in Appendix A to the NPDES Permit Rating Work Sheet found in the VPDES Permit Manual.

1987 SIC Code	1987 SIC Code Title	40 CFR 439 Sub-Part	Sub-part Title	Human Health Toxicity Number	Total Toxicity Number	Industrial Sub-category Number
5541	Gasoline Service Stations	NA	NA	NA	NA	NA

Factor 1 – There is no Human Health Toxicity, Total Toxicity or Industrial category number for SIC code 5541.

Factor 2 – Section B, Type II is selected because the discharge contains process wastewater. The IWC of the discharge flow is less than 10% based on the 4/23/08 FFD critical flow values for Moores Creek included in Appendix B.

Factor 3.A. – NA

Factor 3.B. – N/A.

Factor 3.C. – N/A.

Factor 4. – Changed from last reissuance based on a recent evaluation conducted for nearby downstream discharger (VA0024074). There are no public drinking water supplies within 50 miles downstream of this discharge.

Factor 5.A. – pH limits are based on water quality standards.

Factor 5.B. – The receiving stream is in compliance with applicable water quality standards.

Factor 5.C. – This facility was determined to not exhibit the potential to cause toxicity in Moores Creek. The permit does not include any Toxicity Management Program requirements.

Factor 6. – The facility is not near coastal waters.

NPDES PERMIT RATING WORK SHEET

[ ] Regular Addition
[ ] Discretionary Addition
[X] Score change, but no status change
[ ] Deletion

NPDES NO. **VA0088277**

Facility Name: **WILOCHESS Travel Plaza #735**

City: **Raphine, VA**

Receiving Water: **Moores Creek**

Is this facility a steam electric power plant (SIC=4911) with one or more of the following characteristics?
1. Power output 500 MW or greater (not using a cooling pond/lake)
2. A nuclear power plant
3. Cooling water discharge greater than 25% of the receiving stream's 7Q10 flow rate
[ ] YES; score is 600 (stop here) [X] NO (continue)

Is this permit for a municipal separate storm sewer serving a population greater than 100,000?

[ ] YES; score is 700 (stop here)
[X] NO (continue)

FACTOR 1: Toxic Pollutant Potential

PCS SIC Code: _____ Primary SIC Code: **5541** Other SIC Codes: _____
Industrial Subcategory Code: **000** (Code 000 if no subcategory)

Determine the Toxicity potential from Appendix A. Be sure to use the TOTAL toxicity potential column and check one)

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
[ ] No process waste streams			[ ] 3.	3	15	[X] 7.	7	35
[ ] 1.	1	5	[ ] 4.	4	20	[ ] 8.	8	40
[ ] 2.	2	10	[ ] 5.	5	25	[ ] 9.	9	45
			[ ] 6.	6	30	[ ] 10.	10	50

Code Number Checked : **N/A**

Total Points Factor 4: **0**

FACTOR 2: Flow/Stream Flow Volume *(Complete either Section A or Section B; check only one)*

Section A [ ] Wastewater Flow Only Considered

Wastewater Type (See Instructions)		Code	Points
Type I: Flow < 5 MGD	[ ]	11	0
Flow 5 to 10 MGD	[ ]	12	10
Flow > 10 to 50 MGD	[ ]	13	20
Flow > 50 MGD	[ ]	14	30
Type II: Flow < 1 MGD	[ ]	21	10
Flow 1 to 5 MGD	[ ]	22	20
Flow > 5 to 10 MGD	[ ]	23	30
Flow > 10 MGD	[ ]	24	50
Type III: Flow < 1 MGD	[ ]	31	0
Flow 1 to 5 MGD	[ ]	32	10
Flow > 5 to 10 MGD	[ ]	33	20
Flow > 10 MGD	[ ]	34	3

Section B [X] Wastewater and Stream Flow Considered

Wastewater Type (See Instructions)	Percent of instream Wastewater Concentration at Receiving Stream Low Flow		Code	Points
Type I/III:	< 10 %	[ ]	41	0
	10 % to < 50 %	[ ]	42	10
	> 50 %	[ ]	43	20
Type II:	< 10	[X]	51	0
	10 % to <50 %	[ ]	52	20
	> 50 %	[ ]	53	30

Code Checked from Section A or B: **51**

Total Points Factor 2: **0**

FACTOR 3: Conventional Pollutants

(only when limited by the permit)

A. Oxygen Demanding Pollutant: (check one) [ ] BOD [ ] COD [ ] Other: N/A

			Code	Points
Permit Limits: (check one)	[ ]	< 100 lbs/day	1	0
	[ ]	100 to 1000 lbs/day	2	5
	[ ]	> 1000 to 3000 lbs/day	3	15
	[ ]	> 3000 lbs/day	4	20

Code Checked : **N/A**

Points Scored: **0**

B. Total Suspended Solids (TSS)

			Code	Points
Permit Limits: (check one)	[ ]	< 100 lbs/day	1	0
	[ ]	100 to 1000 lbs/day	2	5
	[ ]	> 1000 to 5000 lbs/day	3	15
	[ ]	> 5000 lbs/day	4	20

Code Checked : **N/A**

Points Scored: **0**

C. Nitrogen Pollutant: (check one) [ ] Ammonia [ ] Other: N/A

		Nitrogen Equivalent	Code	Points
Permit Limits: (check one)	[ ]	< 300 lbs/day	1	0
	[ ]	300 to 1000 lbs/day	2	5
	[ ]	> 1000 to 3000 lbs/day	3	15
	[ ]	> 3000 lbs/day	4	20

Code Checked : **N/A**

Points Scored: **0**

Total Points Factor 3: **0**

FACTOR 4: Public Health Impact

Is there a public drinking water supply located within 50 miles downstream of the effluent discharge (this includes any body of water to which the receiving water is a tributary)? A public drinking water supply may include infiltration galleries, or other methods of conveyance that ultimately get water from the above referenced supply.

[ ] YES (If yes, check toxicity potential number below)

[X] NO (If no, go to Factor 5)

Determine the human health toxicity potential from Appendix A. Use the same SIC code and subcategory reference as in Factor 1. (Be sure to use the human health toxicity group column [ ] check one below)

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
[ ] No process waste streams	0	0	[ ] 3.	3	0	[ ] 7.	7	15
[ ] 1.	1	0	[ ] 4.	4	0	[ ] 8.	8	20
[ ] 2.	2	0	[ ] 5.	5	5	[ ] 9.	9	25
			[ ] 6.	6	10	[ ] 10.	10	30

Code Number Checked : **N/A**

Total Points Factor 4: **0**

FACTOR 5: Water Quality Factors

A. Is (or will) one or more of the effluent discharge limits based on water quality factors of the receiving stream (rather than technology-based federal effluent guidelines, or technology-based state effluent guidelines), or has a wasteload allocation been assigned to the discharge:

		Code	Points
[X]	Yes	1	10
[ ]	No	2	0

B. Is the receiving water in compliance with applicable water quality standards for pollutants that are water quality limited in the permit?

		Code	Points
[X]	Yes	1	0
[ ]	No	2	5

C. Does the effluent discharged from this facility exhibit the reasonable potential to violate water quality standards due to whole effluent toxicity?

		Code	Points
[ ]	Yes	1	10
[X]	No	2	0

Code Number Checked : A 1 B 1 C 1

Total Points Factor 4: A **10** + B **0** + C **0** = **10** TOTAL

FACTOR 6: Proximity to Near Coastal Waters

A. Base Score: Enter flow code here (from Factor 2): **51**

Enter the multiplication factor that corresponds to the flow code: **0.10**

Check appropriate facility HPRI Code (from PCS):

	HPRI#	Code	HPRI Score
[ ]	1	1	20
[ ]	2	2	0
[ ]	3	3	30
[X]	4	4	0
[ ]	5	5	20

Flow Code	Multiplication Factor
11, 31, or 41	0.00
12, 32, or 42	0.05
13, 33, or 43	0.10
14 or 34	0.15
21 or 51	0.10
22 or 52	0.30
23 or 53	0.60
24	1.00

HPRI code checked: 4

Base Score: (HPRI Score) **0** x (Multiplication Factor) **0.10** = **0** (TOTAL POINTS)

B. Additional Points --- NEP Program
For a facility that has an HPRI code of 3, does the facility discharge to one of the estuaries enrolled in the National Estuary Protection (NEP) program (see instructions) or the Chesapeake Bay? **N/A**

	Code	Points
[ ] Yes	1	10
[ ] No	2	0

C. Additional Points --- Great Lakes Area of Concern
For a facility that has an HPRI code of 5, does the facility discharge any of the pollutants of concern into one of the Great Lakes' 31 areas of concern (see Instructions)? **N/A**

	Code	Points
[ ] Yes	1	10
[ ] No	2	0

Code Number Checked : A 4 B -- C --

Points Factor 6: A **0** + B **0** + C **0** = **0** TOTAL

Score Summary

Factor	Description	Total Points
1	Toxic Pollutant Potential	**0**
2	Flows/Stream Flow Volume	**0**
3	Conventional Pollutants	**0**
4	Public Health Impacts	**0**
5	Water Quality Factors	**10**
6	Proximity to Near Coastal Waters	**0**
	TOTAL (Factors 1-6)	**10**

S1. Is the total score equal to or greater than 80? [ ] Yes (Facility is a major) [X] No

S2. If the answer to the above questions is no, would you like this facility to be discretionary major?

[X] No

[ ] Yes (Add 500 points to the above score and provide reason below:

Reason: _____

New Score: **10**

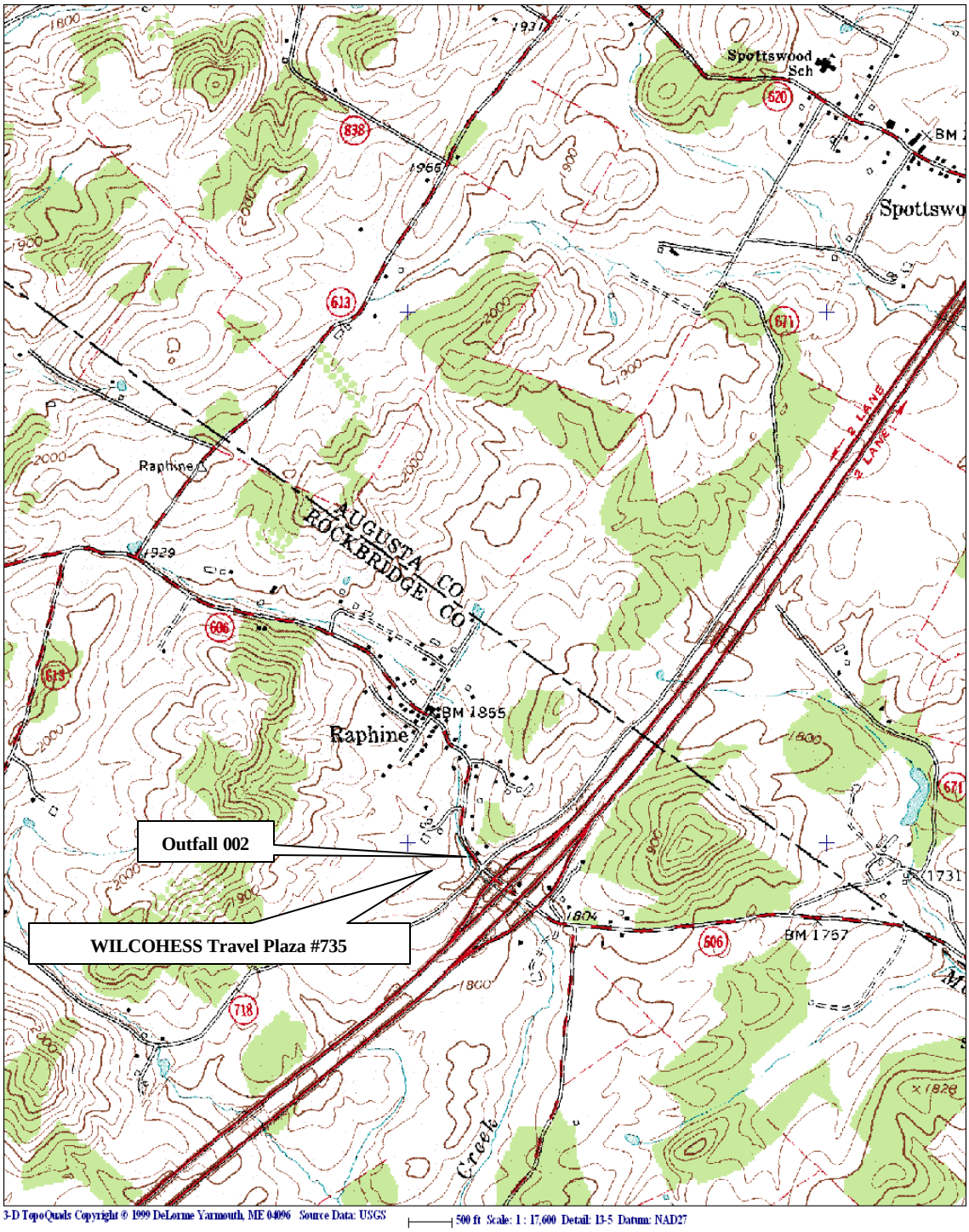
Old Score: **30**

Trevor Wallace
Permit Reviewer's Name
540-574-7807
Phone Number
November 19, 2008
Date

APPENDIX B

DISCHARGE LOCATION DESCRIPTION AND RECEIVING WATERS INFORMATION

This facility discharges to Moores Creek in Rockbridge County. The locations of the facility and outfall point are shown on the topographic map below.



Relevant points of interest within the watershed and in the vicinity of the discharge are shown on the enclosed Water Quality Assessment TMDL Review and corresponding map.

WATER QUALITY ASSESSMENTS TMDL REVIEW
UPPER JAMES RIVER BASIN
10/27/2008

IMPAIRED SEGMENT:

SEGMENT ID	STREAM	SEGMENT START	SEGMENT END	LENGTH	PARAMETER
VAV-I34R-01	Hays Creek	11.99	0.00	19.64	Fecal Coliform
VAV-I34R-02	Hays Creek	24.87	0.00	24.87	Temperature
VAV-I36R-02	Moores Creek	8.42	0.00	8.42	Benthic

PERMITS:

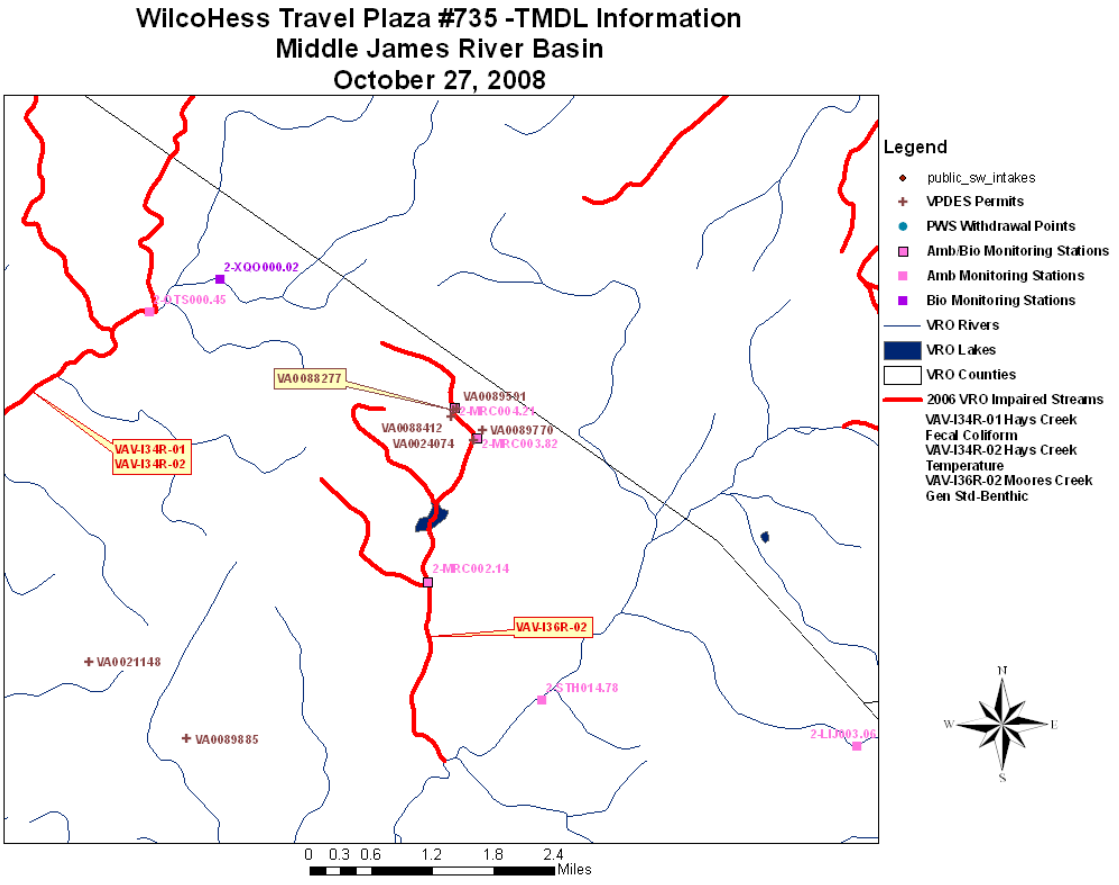
PERMIT:	FACILITY:	STREAM:	MILE	LAT	LONG	WBID
VA0088277	**Wilcohess Travel Plaza 735**	**Moores Creek**	**4.06**	**375558**	**0791354**	**VAV-I36R**
VA0024074	White's Truck Stop STP	Moores Creek	3.69	375543	0791341	VAV-I36R
VA0088412	Raphine Texaco	Moores Creek X-Trib	0.231	375555	0791355	VAV-I36R
VA0089591	Watts Place	Moores Creek	4.07	375559	0791352	VAV-I36R
VA0089770	Sunoco, Inc.	Moores Creek X-Trib	0.08	375548	0791335	VAV-I36R
VA0089885	Fairfield Square	Marlbrook Creek X-Trib	0.27	375311	0791647	VAV-I36R

MONITORING STATIONS

STREAM	NAME	MILE	RECORD	LAT	LONG
Moores Creek	2-MRC002.14	2.14	3/17/03	375431	0791410
Moores Creek	2-MRC003.82	3.82	3/17/03	375544	0791338
Moores Creek	2-MRC004.21	4.21	3/17/03	375600	0791352
Otts Creek	2-OTS000.45	0.45	7/2003	375649	0791710
South River	2-STH014.78	14.78	7/2001	375330	-791256
Poor Creek X-Trib	2-XQO000.02	0.02		375706	0791624

PUBLIC WATER SUPPLY INTAKES:

OWNER:	STREAM:	RIVER MILE:
None		



MEMORANDUM
DEPARTMENT OF ENVIRONMENTAL QUALITY
VALLEY REGIONAL OFFICE

4411 Early Road – P.O. Box 3000 Harrisonburg, VA 22801

SUBJECT: Flow Frequency Determination
White's Truck Stop – VPDES Permit No. VA0024074, Rockbridge County

TO: File

FROM: Jason R. Dameron

DATE: April 23, 2008

This memo supersedes Paul Herman's flow frequency determination dated May 4, 2000. The Virginia DEQ conducted several flow measurements on Moores Creek from 1994 to 1999. The measurements were made just above the Wilco Travel Plaza STP outfall at Raphine, VA. The measurements correlated very well with the same day daily mean values from two continuous record gauges; one on the Maury River at Rockbridge Baths, VA #02021500 and the second on Kerrs Creek near Lexington, VA #02022500. The measurements and daily mean values from each continuous record gauge were plotted on a logarithmic graph and a best-fit line was drawn through the data points. The flow frequencies from each reference gauge were plugged into the equation for the regression line and the associated flow frequencies were determined from the graph. The resulting flow values from both reference gauges were averaged, and the flow frequencies at the measurement site were determined. The flow frequencies at the discharge point were then determined by using the values at the measurement site and adjusting them by proportional drainage areas. The flow frequencies are presented below.

Maury River at Rockbridge Baths, VA (#02021500):
Drainage Area = 329 mi^2

1Q30 =	9.4 cfs		High Flow 1Q10 =	31 cfs
1Q10 =	12 cfs		High Flow 7Q10 =	36 cfs
7Q10 =	13 cfs		High Flow 30Q10 =	53 cfs
30Q10 =	17 cfs		Harmonic Mean =	78 cfs
30Q5 =	20 cfs		Annual Average =	386 cfs

Kerrs Creek near Lexington, VA (#02022500):
Drainage Area = 35.0 mi^2

1Q30 =	3.8 cfs		High Flow 1Q10 =	6.2 cfs
1Q10 =	4.4 cfs		High Flow 7Q10 =	7.3 cfs
7Q10 =	4.8 cfs		High Flow 30Q10 =	9.1 cfs
30Q10 =	5.3 cfs		Harmonic Mean =	14 cfs
30Q5 =	6.0 cfs		Annual Average =	36.3 cfs

Moores Creek above Wilco Travel Plaza and Watts Place discharges at Raphine, VA (02033390):
Drainage Area = 0.70 mi^2

1Q30 =	0.16 cfs	0.10 MGD	High Flow 1Q10 =	0.25 cfs	0.16 MGD
1Q10 =	0.17 cfs	0.11 MGD	High Flow 7Q10 =	0.27 cfs	0.17 MGD
7Q10 =	0.18 cfs	0.12 MGD	High Flow 30Q10 =	0.32 cfs	0.21 MGD
30Q10 =	0.20 cfs	0.13 MGD	Harmonic Mean =	0.41 cfs	0.26 MGD
30Q5 =	0.22 cfs	0.14 MGD	Annual Average =	0.86 cfs	0.55 MGD

Moores Creek above White's Truck Stop outfall:
Drainage Area = 1.08 mi^2

1Q30 =	0.25 cfs	0.16 MGD	High Flow 1Q10 =	0.39 cfs	0.25 MGD
1Q10 =	0.26 cfs	0.17 MGD	High Flow 7Q10 =	0.42 cfs	0.27 MGD
7Q10 =	0.28 cfs	0.18 MGD	High Flow 30Q10 =	0.49 cfs	0.32 MGD
30Q10 =	0.31 cfs	0.20 MGD	Harmonic Mean =	0.63 cfs	0.41 MGD
30Q5 =	0.34 cfs	0.22 MGD	Annual Average =	1.3 cfs	0.84 MGD

This analysis assumes there are no significant discharges, withdrawals or springs upstream of the discharge point. The high flow months are January through May.

Mixing zone predictions were performed using information specific to the discharge and receiving stream characteristics with the Virginia DEQ Mixing Zone Analysis Version 2.1 program, and the results are presented below.

Annual
Effluent Flow = 0.0048 MGD
Stream 7Q10 = 0.12 MGD
Stream 30Q10 = 0.13 MGD
Stream 1Q10 = 0.11 MGD
Stream slope = 0.02 ft/ft
Stream width = 3 ft
Bottom scale = 3
Channel scale = 1

Mixing Zone Predictions @ 7Q10
Depth = .1352 ft
Length = 43. ft
Velocity = .4764 ft/sec
Residence Time = .001 days

Recommendation: A complete mix assumption is appropriate for this situation and the entire 7Q10 may be used.

Mixing Zone Predictions @ 30Q10
Depth = .1418 ft
Length = 41.22 ft
Velocity = .4905 ft/sec
Residence Time = .001 days

Recommendation: A complete mix assumption is appropriate for this situation and the entire 30Q10 may be used.

Mixing Zone Predictions @ 1Q10
Depth = .1283 ft
Length = 45.02 ft
Velocity = .4614 ft/sec
Residence Time = .0271 hours

Recommendation: A complete mix assumption is appropriate for this situation and the entire 1Q10

APPENDIX C

EFFLUENT SCREENING AND EFFLUENT LIMITATIONS

EFFLUENT LIMITATIONS

A comparison of technology and water quality-based limits was performed, and the most stringent limits were selected. The selected limits are summarized in the table below.

Final Limits Outfall No. 002 Design Average Flow: 0.0048 MGD

PARAMETER	BASIS FOR LIMITS	EFFLUENT LIMITATIONS				MONITORING REQUIREMENTS	
		MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Flow	2	NL	NA	NA	NL	1/Month	Estimate
pH (S.U.)	1,2	NA	NA	6.5	9.5	1/Month	Grab
TPH (mg/L)	2	NA	NA	NA	15	1/Month	Grab
Naphthalene (ug/L)	2	NA	NA	NA	10	1/Month	Grab

NL = No Limitation, monitoring required
NA = Not Applicable
TPH = Total Petroleum Hydrocarbons

Bases for Effluent Limitations

1. *Water Quality Standards (9 VAC 25-260-5 et seq.).*
2. *9 VAC 25-120: General Virginia Pollutant Discharge Elimination System (VPDES) Permit Regulation for Discharges from Petroleum Contaminated Sites, Groundwater Remediation and Hydrostatic Tests*

LIMITING FACTORS – OVERVIEW:

The following potential limiting factors have been considered in developing this permit and fact sheet:

Water Quality Management Plan Regulation (9 VAC 25-720)	
A. TMDL limits	None
B. Non-TMDL WLAs	None
C. CBP (TN & TP) WLAs	None
Federal Effluent Guidelines	None
BPJ/Agency Guidance limits	None
Water Quality-based Limits - numeric	pH
Water Quality-based Limits - narrative	None
Toxics Management Plan (TMP)	None
Storm Water Limits	None
VPDES Individual Permit Regulation	None
VPDES General Permit Regulations	Flow, TPH, Naphthalene, pH

EVALUATION OF THE EFFLUENT

OUTFALL 001

The discharge from this outfall is the result of storm water run-off from a retail facility. No evidence of process wastewater flow leading to Outfall 001 was observed during the December 3, 2008 site visit. Monitoring for Flow, pH, $CBOD_5$, TPH, and Naphthalene in the Outfall 001 discharge was required by the previous permit. There are no regulated discharge requirements for storm water generated from retail facilities. As such, the effluent requirements included in the previous permit were removed at this reissuance. There shall be no discharge of process wastewater from this outfall.

Previous effluent requirements were included in the permit based on a BPJ evaluation. These requirements are not being removed based on newer less stringent regulations or standards. Therefore, removal of the effluent requirements is in accordance with the Antibacksliding regulation.

Any unauthorized discharges from the OWS system into the storm water pond feeding Outfall 001 must be reported to DEQ in accordance with Part II of the VPDES Permit.

OUTFALL 002

CONVENTIONAL POLLUTANTS

Flow data demonstrating the discharge is intermittent was submitted to DEQ on December 20, 2006. Because the discharge does not flow during critical dry conditions, evaluating for $CBOD_5$ limitations is not appropriate.

Effluent Flow monitoring and pH limitations are included in the permit based on the requirements of 9 VAC 25-120 and 9 VAC 25-260, respectively. These requirements are carried forward from the previous permit.

This discharge is not a significant source of nutrients. Nutrient monitoring or limitations are not required.

TOXIC POLLUTANTS

WQS-WLA SPREADSHEET DATA

Stream: Water quality data for the receiving stream was obtained from Ambient Monitoring Station No. 2-STH000.21 on the South River at the Rte 608 Bridge. Toxic substances are assumed absent in the receiving stream because there are no data to indicate their presence.

Stream Parameter	**Value**	**Units**
Mean Hardness (as $CaCO_3$) =	111	mg/L
90^{th} Percentile Temperature (Annual) =	23.2	°C
90^{th} Percentile Temperature (Wet season*) =	15.2	°C
90^{th} Percentile Maximum pH =	8.6	SU
10^{th} Percentile Maximum pH =	7.8	SU

Effluent: The pH data was obtained from monitoring results submitted by the permittee. The hardness value is based on data for a similar downstream discharge (VA0024074). Since no temperature data was available, the effluent temperature was assumed to be the same as the stream temperature.

Effluent Parameter	Value	Units
Mean Hardness (as $CaCO_3$) =	93	mg/L
90th Percentile Temperature (Annual) =	23.2	°C
90th Percentile Temperature (Wet season*) =	15.2	°C
90th Percentile Maximum pH =	8.0	SU
10th Percentile Maximum pH =	6.8	SU

* Wet Season = January through May

Water Quality Standards (WQSs) and Waste Load Allocations (WLAs) were calculated for the WQS parameters for which data is available. Those WQSs and WLAs are presented below.

WQS-WLA SPREADSHEET INPUT

WATER QUALITY CRITERIA / WASTE LOAD ALLOCATION ANALYSIS

Facility Name: WILCOHESS Travel Plaza #735
Receiving Stream: Moores Creek
Permit No.: VA0088277
Date: 12/15/2008
Version: OWP Guidance Memo 00-2011 (8/24/00)

Stream Information		Stream Flows		Mixing Information			Effluent Information	
Mean Hardness (as CaCO3) =	111 mg/L	1Q10 (Annual) =	0.11 MGD	Annual	- 1Q10 Flow =	100 %	Mean Hardness (as CaCO3) =	93 mg/L
90% Temperature (Annual) =	23.2 deg C	7Q10 (Annual) =	0.12 MGD		- 7Q10 Flow =	100 %	90% Temp (Annual) =	23.2 deg C
90% Temperature (Wet season) =	15.2 deg C	30Q10 (Annual) =	0.13 MGD		- 30Q10 Flow =	100 %	90% Temp (Wet season) =	15.2 deg C
90% Maximum pH =	8.6 SU	1Q10 (Wet season) =	0.16 MGD	Wet Season	- 1Q10 Flow =	100 %	90% Maximum pH =	8.0 SU
10% Maximum pH =	7.8 SU	30Q10 (Wet season) =	0.21 MGD		- 30Q10 Flow =	100 %	10% Maximum pH =	6.8 SU
Tier Designation =	1	30Q5 =	0.14 MGD				Current Discharge Flow =	0.0048 MGD
Public Water Supply (PWS) Y/N? =	N	Harmonic Mean =	0.26 MGD				Discharge Flow for Limit Analysis =	0.0048 MGD
V(alley) or P(iedmont)? =	V	Annual Average =	0.55 MGD					
Trout Present Y/N? =	N							
Early Life Stages Present Y/N? =	Y							

Footnotes:

1. All concentrations expressed as micrograms/liter (ug/l), unless noted otherwise.
2. All flow values are expressed as Million Gallons per Day (MGD).
3. Discharge volumes are highest monthly average or 2C maximum for Industries and design flows for Municipals.
4. Hardness expressed as mg/l CaCO3. Standards calculated using Hardness values in the range of 25-400 mg/l CaCO3.
5. "Public Water Supply" protects for fish & water consumption. "Other Surface Waters" protects for fish consumption only.
6. Carcinogen "Y" indicates carcinogenic parameter.
7. Ammonia WQSs selected from separate tables, based on pH and temperature.
8. Metals measured as Dissolved, unless specified otherwise.
9. WLA = Waste Load Allocation (based on standards).
10. WLA = Waste Load Allocation (based on standards).
11. WLAs are based on mass balances (less background, if data exist).
12. Acute - 1 hour avg. concentration not to be exceeded more than 1/3 years.
13. Chronic - 4 day avg. concentration (30 day avg. for Ammonia) not to be exceeded more than 1/3 years.
14. Mass balances employ 1Q10 for Acute, 30Q10 for Chronic Ammonia, 7Q10 for Other Chronic, 30Q5 for Non-carcinogens, Harmonic Mean for Carcinogens, and Annual Average for Dioxin. Actual flows employed are a function of the mixing analysis and may be less than the actual critical flows.
15. Effluent Limitations are calculated elsewhere using the minimum WLA and EPA's statistical approach (Technical Support Document).

WQS-WLA SPREADSHEET OUTPUT

Facility Name: WILCOHESS Travel Plaza #735
Permit No.: VA0088277
Receiving Stream: Moores Creek
Date: 12/15/2008

		WATER QUALITY CRITERIA (0.005 MGD Discharge Flow - Mix per "Mixer")				NON-ANTIDEGRADATION WASTE LOAD ALLOCATIONS (0.005 MGD Discharge - Mix per "Mixer")		
		Aquatic Protection		Human Health		Aquatic Protection		Human
Toxic Parameter and Form	Carcinogen?	Acute	Chronic	Public Water Supplies	Other Surface Waters	Acute	Chronic	Health
Ammonia-N (Annual)	N	2.9E+00 mg/L	5.7E-01 mg/L	None	None	7.0E+01 mg/L	1.6E+01 mg/L	N/A
Benzene	Y	None	None	1.2E+01	7.1E+02	N/A	N/A	3.9E+04
Ethylbenzene	N	None	None	3.1E+03	2.9E+04	N/A	N/A	8.7E+05
Toluene	N	None	None	6.8E+03	2.0E+05	N/A	N/A	6.0E+06

WQS toxics effluent data were analyzed per the protocol for evaluation of effluent toxic pollutants included in this appendix with the following results:

- Effluent data for Ammonia-N was submitted with the permit application. The DEQ STAT evaluation is provided in this appendix and demonstrates that no additional monitoring or limits for Ammonia-N are necessary.

- Effluent data for Benzene, Ethylbenzene, and Toluene were submitted with the permit application. These data are less than the applicable human health WQC. Aquatic life WQC are not listed for any of these pollutants. No additional monitoring or limits for these parameters are necessary.

No additional WQS toxics monitoring is required for this discharge.

Results for toxic pollutants that are not addressed in the WQS, but are included in 9 VAC 25-120 and require monitoring and limitations are as follows:

- Effluent monitoring and a limit for TPH are included in the permit based on the requirements of 9 VAC 25-120. These requirements are carried forward from the previous permit. Because the OWS treats wastewater from an area where only diesel fueling activities occur and because it is isolated from the gasoline fueling areas, the permittee will be required to report only TPH-DRO on the DMR. Current guidance suggests that reporting TPH – GRO and TPH – DRO may cause testing results to be biased high due to double counting of peaks by the test method.

- Effluent monitoring and a limit for Naphthalene are included in the permit based on the requirements of 9 VAC 25-120. This is a new requirement for this facility. A four year schedule of compliance for meeting the new limit is included in the permit.

PROTOCOL FOR THE EVALUATION OF THE EFFLUENT – TOXIC POLLUTANTS

Toxic pollutants were evaluated in accordance with OWP Guidance Memo No. 00-2011 (8/24/00). According to this guidance, industrial facilities for which a Toxics Management Program is not required are treated as if there are no toxic pollutants in their discharge unless there is actual evidence to indicate otherwise. A Toxics Management Program (TMP) review was performed in accordance with DEQ Guidance, and a TMP is not required for this facility.

Acute and Chronic Waste Load Allocations (WLA_a and WLA_c) were analyzed according to the protocol below using a statistical approach (STAT.exe) to determine the necessity and magnitude of limits. Human Health Waste Load Allocations (WLA_{hh}) were analyzed according to the same protocol through a simple comparison with the effluent data. If the WLA_{hh} exceeded the effluent datum or data mean, no limits were required. If the effluent datum or data mean exceeded the WLA_{hh}, the WLA_{hh} was imposed as the limit. Since there are no data available for any toxic pollutants immediately upstream of this discharge, all upstream background pollutant concentrations are assumed to be "0".

The steps used in evaluating available effluent data are as follows:

A. If all data are reported as "below detection" or < the required Quantification Level (QL) (or, for metals, in a form other than "dissolved"), then the data are not suitable for analysis and no further monitoring is required.

B. If any data value is reported as detectable at or above the required QL, then the data are adequate to determine whether effluent limits are needed.

B.1. If the evaluation indicates that no limits are needed, then no further monitoring is required.

B.2. If the evaluation indicates that limits are needed, then the limits and associated requirements are specified in the draft permit.

Parameter	CASRN	Type	QL (µg/L)	Data (µg/L unless noted otherwise)	Source of Data	Data Eval
Ammonia-N (mg/L)	766-41-7	X	0.2 mg/L	**3.68 mg/L**	**a**	**B.1**
Benzene [C]	71-43-2	V	10.0	**158**	**a**	**B.1**
Ethylbenzene	100-41-4	V	10.0	**173**	**a**	**B.1**
Toluene	108-88-3	V	10.0	**1560**	**a**	**B.1**

"Type" column indicates a category assigned to the referenced substance (see below):
V = Volatile Organic Compounds
X = Miscellaneous Compounds and Parameters

The **superscript "C"** following the parameter name indicates that the substance is a known or suspected carcinogen; human health criteria at risk level 10^{-5}.

CASRN = Chemical Abstract Service Registry Number for each parameter is referenced in the current Water Quality Standards. A unique numeric identifier designating only one substance. The Chemical Abstract Service is a division of the American Chemical Society.

"Source of Data" codes:
a = data included in permit application

"Data Evaluation" codes:
See section titled PROTOCOL FOR THE EVALUATION OF EFFLUENT - TOXIC POLLUTANTS for an explanation of the code used.

STAT EVALUATION

Chemical = Ammonia
Chronic averaging period = 30
WLAa = 70
WLAc = N/A – Intermittent Discharge
Q.L. = 0.2
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

observations = 1
Expected Value = 3.68
Variance = 4.87526
C.V. = 0.6
97th percentile daily values = 8.95497
97th percentile 4 day average = 6.12274
97th percentile 30 day average = 4.43827
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

No limit is required for this material

The data are: 3.68

OUTFALL 003

The discharge from this outfall is the result of storm water run-off from the retail facility parking lot. No evidence of process wastewater flow leading to Outfall 003 was observed during the December 3, 2008 site visit. As such, the effluent requirements included in the previous permit were removed at this reissuance. There shall be no discharge of process wastewater from this outfall.

APPENDIX D

PERMIT CHANGES AND BASES FOR SPECIAL CONDITIONS

Tabulated below are the sections of the permit, with any changes and the reasons for the changes identified. Also provided is the basis for each of the permit special conditions.

Cover Page
- Content and format as prescribed by the VPDES Permit Manual.
- The city reference was removed.

Part I.A.1. **Effluent Limitations and Monitoring Requirements: Outfall 002 – Process Wastewater:** Bases for effluent limitations provided in previous pages of this fact sheet. Monitoring requirements are as described in 9 VAC 25-120. *Updates Part I.A.3. of the previous permit with the following:*
- Introduction language was updated since discharge has been demonstrated to be intermittent.
- Effluent limitations for Naphthalene were included.
- Footnotes were revised to include testing requirements for TPH and Naphthalene samples. These footnotes are updates to the previous permit Part I.B.3. and Part I.B.4.
- Removed footnote addressing regulation of chemicals into the OWS.

Part I.B. **Schedule of Compliance:** *New Requirement.* 9 VAC 25-31-250 allows for schedules of compliance, when appropriate, which will lead to compliance with the Clean Water Act, the State Water Control Law and regulations promulgated under them.

Part I.C. **Effluent Limitations and Monitoring Requirements – Additional Instructions:** *Updates Part I.B. of the previous permit*. Authorized by VPDES Permit Regulation, 9 VAC 25-31-190 J 4 and 220 I. This condition is necessary when a maximum level of quantification and/or a specific analytical method is required in order to assess compliance with a permit limit or to compare effluent quality with a numeric criterion. The condition also establishes protocols for calculation of reported values.

Part I.D.1. **95% Capacity Reopener:** *Updates Part I.C.1 of the previous permit.* Required by VPDES Permit Regulation, 9 VAC 25-31-200 B 4 for certain permits. Included for this facility to ensure that adequate treatment capacity will continue to be provided as influent flows and/or loadings increase.

Part I.D.2. **Materials Handling/Storage:** *Identical to Part I.C.4. of the previous permit.* 9 VAC 25-31-280.B.2. requires that the types and quantities of "wastes, fluids, or pollutants which are … treated, stored, etc." be addressed for all permitted facilities.

Part I.D.3. **O&M Manual Requirement:** *Updates Part I.C.5. of the previous permit.* Code of Virginia at 62.1-44.16, VPDES Permit Regulation 9 VAC 25-31-190 E, and 40 CFR 122.41(e) require proper operation and maintenance of the permitted facility. Added requirement to describe procedures for documenting compliance with the permit requirement that there shall be no discharge of floating solids or visible foam in other than trace amounts.

Part I.D.4. **Reopeners:**

New Requirement: a. Section 303(d) of the Clean Water Act requires that total maximum daily loads (TMDLs) be developed for streams listed as impaired. This special condition is to allow the permit to be reopened if necessary to bring it into compliance with any applicable TMDL approved for the receiving stream. The reopener recognizes that, according to section 402(o)(1) of the Clean Water Act, limits and/or conditions may be either more or less stringent than those contained in this permit. Specifically, they can be relaxed if they are the result of a TMDL, basin plan, or other wasteload allocation prepared under section 303 of the Act.

New Requirement: b. 9 VAC 25-31-390 A authorizes DEQ to modify VPDES permits to promulgate amended water quality standards.

Part I.D.5. **Notification Levels:** *Identical to Part I.C.3. of the previous permit.* Required by the VPDES Permit Regulation 9 VAC 25-31-200 A for all manufacturing, commercial, mining, and silvicultural dischargers.

Part I.D.6. **OWS Influent Restrictions:** *Updates Part I.C.8. of the previous permit.* Restricts the nature of the influent to the OWS to ensure that the chemicals and substances in the wastewater do not compromise the efficacy of the treatment system.

Part II CONDITIONS APPLICABLE TO ALL VPDES PERMITS. VPDES Permit Regulation 9 VAC 25-31-190 requires all VPDES permits to contain or specifically cite the conditions listed.

DELETED SPECIAL CONDITIONS

Tabulated below are the sections of the previous permit that were deleted and the basis for this action.

Part I.A.1. **Effluent Limitations and Monitoring Requirements: Outfall 001 – Storm water:** There are no regulated discharge requirements for storm water generated from retail facilities.

Part I.A.2 **Effluent Limitations and Monitoring Requirements: Outfall 002 – Continuous Process Wastewater:** The process wastewater flow was demonstrated to be intermittent.

Part I.A.4. **Effluent Limitations and Monitoring Requirements: Outfall 003 – Storm water:** There are no regulated discharge requirements for storm water generated from retail facilities.

Part I.C.2. **Water Quality Criteria Reopener:** There are no WQC with monitoring only included in the permit.

Part I.C.6. **Oil Storage Ground Water Monitoring Reopener:** This facility does not monitor groundwater under the Oil Discharge Contingency Plans and Administrative Fees for Approval Regulation, 9 VAC 25-90-10 et seq.

Part I.C.5.g. **Operations and Maintenance Manual Requirement:** Removed previous Part I.C.5.g. since this requirement is adequately addressed under Part I.D.3. of the permit.

Part I.C.5.f. **Operations and Maintenance Manual Requirement:** Removed previous Part I.C.5.f. since the process wastewater flow was demonstrated to be intermittent.

Part I.C.7 **Discharge Conditions for Outfall 002:** Flow data demonstrating the discharge is intermittent was submitted to DEQ on December 20, 2006.

Revised 2/2003

State "Transmittal Checklist" to Assist in Targeting Municipal and Industrial Individual NPDES Draft Permits for Review

Part I. State Draft Permit Submission Checklist

In accordance with the MOA established between the Commonwealth of Virginia and the United States Environmental Protection Agency, Region III, the Commonwealth submits the following draft National Pollutant Discharge Elimination System (NPDES) permit for Agency review and concurrence.

Facility Name: Wilcohess Travel Plaza 735

NPDES Permit Number: VA0088277

Permit Writer Name: Trevor Wallace

Date: March 16, 2009

Major [ ] **Minor** [X] **Industrial** [X] **Municipal** [ ]

I.A. Draft Permit Package Submittal Includes:	Yes	No	N/A
1. Permit Application?	X		
2. Complete Draft Permit (for renewal or first time permit – entire permit, including boilerplate information)?	X		
3. Copy of Public Notice?		**X**	
4. Complete Fact Sheet?	X		
5. A Priority Pollutant Screening to determine parameters of concern?	X		
6. A Reasonable Potential analysis showing calculated WQBELs?	X		
7. Dissolved Oxygen calculations?			X
8. Whole Effluent Toxicity Test summary and analysis?	X		
9. Permit Rating Sheet for new or modified industrial facilities?	X		

I.B. Permit/Facility Characteristics	Yes	No	N/A
1. Is this a new, or currently unpermitted facility?		X	
2. Are all permissible outfalls (including combined sewer overflow points, non-process water and storm water) from the facility properly identified and authorized in the permit?	X		
3. Does the fact sheet **or** permit contain a description of the wastewater treatment process?	X		

I.B. Permit/Facility Characteristics – cont.	Yes	No	N/A
4. Does the review of PCS/DMR data for at least the last 3 years indicate significant non-compliance with the existing permit?		X	
5. Has there been any change in streamflow characteristics since the last permit was developed?		X	
6. Does the permit allow the discharge of new or increased loadings of any pollutants?		X	
7. Does the fact sheet **or** permit provide a description of the receiving water body(s) to which the facility discharges, including information on low/critical flow conditions and designated/existing uses?	X		
8. Does the facility discharge to a 303(d) listed water?	X		
a. Has a TMDL been developed and approved by EPA for the impaired water?		X	
b. Does the record indicate that the TMDL development is on the State priority list and will most likely be developed within the life of the permit?		X	
c. Does the facility discharge a pollutant of concern identified in the TMDL or 303(d) listed water?			X
9. Have any limits been removed, or are any limits less stringent, than those in the current permit?	X		
10. Does the permit authorize discharges of storm water?		X	
11. Has the facility substantially enlarged or altered its operation or substantially increased its flow or production?		X	
12. Are there any production-based, technology-based effluent limits in the permit?		X	
13. Do any water quality-based effluent limit calculations differ from the State's standard policies or procedures?		X	
14. Are any WQBELs based on an interpretation of narrative criteria?		X	
15. Does the permit incorporate any variances or other exceptions to the State's standards or regulations?		X	
16. Does the permit contain a compliance schedule for any limit or condition?	X		
17. Is there a potential impact to endangered/threatened species or their habitat by the facility's discharge(s)?		X	
18. Have impacts from the discharge(s) at downstream potable water supplies been evaluated?	X		
19. Is there any indication that there is significant public interest in the permit action proposed for this facility?		X	
20. Have previous permit, application, and fact sheet been examined?	X		

Part II. NPDES Draft Permit Checklist

Region III NPDES Permit Quality Review Checklist – For Non-Municipals

(To be completed and included in the record for all non-POTWs)

II.A. Permit Cover Page/Administration	Yes	No	N/A
1. Does the fact sheet **or** permit describe the physical location of the facility, including latitude and longitude (not necessarily on permit cover page)?	X		
2. Does the permit contain specific authorization-to-discharge information (from where to where, by whom)?	X		

II.B. Effluent Limits – General Elements	Yes	No	N/A
1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a comparison of technology and water quality-based limits was performed, and the most stringent limit selected)?	X		
2. Does the fact sheet discuss whether "antibacksliding" provisions were met for any limits that are less stringent than those in the previous NPDES permit?	X		

II.C. Technology-Based Effluent Limits (Effluent Guidelines & BPJ)	Yes	No	N/A
1. Is the facility subject to a national effluent limitations guideline (ELG)?		X	
a. If yes, does the record adequately document the categorization process, including an evaluation of whether the facility is a new source or an existing source?			X
b. If no, does the record indicate that a technology-based analysis based on Best Professional Judgement (BPJ) was used for all pollutants of concern discharged at treatable concentrations?	X		
2. For all limits developed based on BPJ, does the record indicate that the limits are consistent with the criteria established at 40 CFR 125.3(d)?	X		
3. Does the fact sheet adequately document the calculations used to develop both ELG and /or BPJ technology-based effluent limits?	X		
4. For all limits that are based on production or flow, does the record indicate that the calculations are based on a "reasonable measure of ACTUAL production" for the facility (not design)?			X
5. Does the permit contain "tiered" limits that reflect projected increases in production or flow?		X	
a. If yes, does the permit require the facility to notify the permitting authority when alternate levels of production or flow are attained?			X
6. Are technology-based permit limits expressed in appropriate units of measure (e.g., concentration, mass, SU)?			X

II.C. Technology-Based Effluent Limits (Effluent Guidelines & BPJ) – cont.	Yes	No	N/A
7. Are all technology-based limits expressed in terms of both maximum daily, weekly average, and/or monthly average limits?			X
8. Are any final limits less stringent than required by applicable effluent limitations guidelines or BPJ?		X	

II.D. Water Quality-Based Effluent Limits	Yes	No	N/A
1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering State narrative and numeric criteria for water quality?	X		
2. Does the record indicate that any WQBELs were derived from a completed and EPA approved TMDL?		X	
3. Does the fact sheet provide effluent characteristics for each outfall?	X		
4. Does the fact sheet document that a "reasonable potential" evaluation was performed?	X		
a. If yes, does the fact sheet indicate that the "reasonable potential" evaluation was performed in accordance with the State's approved procedures?	X		
b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or a mixing zone?	X		
c. Does the fact sheet present WLA calculation procedures for all pollutants that were found to have "reasonable potential"?	X		
d. Does the fact sheet indicate that the "reasonable potential" and WLA calculations accounted for contributions from upstream sources (i.e., do calculations include ambient/background concentrations where data are available)?	X		
e. Does the permit contain numeric effluent limits for all pollutants for which "reasonable potential" was determined?	X		
5. Are all final WQBELs in the permit consistent with the justification and/or documentation provided in the fact sheet?	X		
6. For all final WQBELs, are BOTH long-term (e.g., average monthly) AND short-term (e.g., maximum daily, weekly average, instantaneous) effluent limits established?	X		
7. Are WQBELs expressed in the permit using appropriate units of measure (e.g., mass, concentration)?	X		
8. Does the fact sheet indicate that an "antidegradation" review was performed in accordance with the State's approved antidegradation policy?	X		

II.E. Monitoring and Reporting Requirements	Yes	No	N/A
1. Does the permit require at least annual monitoring for all limited parameters?	X		
a. If no, does the fact sheet indicate that the facility applied for and was granted a monitoring waiver, AND, does the permit specifically incorporate this waiver?			
2. Does the permit identify the physical location where monitoring is to be performed for each outfall?	X		
3. Does the permit require testing for Whole Effluent Toxicity in accordance with the State's standard practices?			X

II.F. Special Conditions	Yes	No	N/A
1. Does the permit require development and implementation of a Best Management Practices (BMP) plan or site-specific BMPs?		X	
a. If yes, does the permit adequately incorporate and require compliance with the BMPs?			
2. If the permit contains compliance schedule(s), are they consistent with statutory and regulatory deadlines and requirements?	X		
3. Are other special conditions (e.g., ambient sampling, mixing studies, TIE/TRE, BMPs, special studies) consistent with CWA and NPDES regulations?	X		

II.G. Standard Conditions	Yes	No	N/A
1. Does the **permit** contain all 40 CFR 122.41 standard conditions or the State equivalent (or more stringent) conditions?	X		

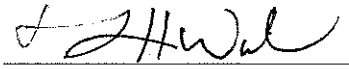
List of Standard Conditions – 40 CFR 122.41

Duty to comply
Duty to reapply
Need to halt or reduce activity not a defense
Duty to mitigate
Proper O & M
Permit actions
Property rights
Duty to provide information
Inspections and entry
Monitoring and records
Signatory requirement
Bypass
Upset
Reporting Requirements
Planned change
Anticipated noncompliance
Transfers
Monitoring reports
Compliance schedules
24-Hour reporting
Other non-compliance

2. Does the permit contain the additional standard condition (or the State equivalent or more stringent conditions) for existing non-municipal dischargers regarding pollutant notification levels [40 CFR 122.42(a)]?	X		

Part III. Signature Page

Based on a review of the data and other information submitted by the permit applicant, and the draft permit and other administrative records generated by the Department/Division and/or made available to the Department/Division, the information provided on this checklist is accurate and complete, to the best of my knowledge.

Name	Trevor Wallace
Title	Environmental Engineer
Signature	
Date	March 16, 2009